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07/788,801	11/07/91	BAUMGARTNER W	JEK/BEU

MATECKI, J. EXAMINER

E4M1/0727

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ART UNIT	PAPER NUMBER
2405	11

DATE MAILED: 07/27/93

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 3/8 & 5/18/93 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice re Patent Drawing, PTO-948.
3. ☐ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of Informal Patent Application, Form PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____

Part II SUMMARY OF ACTION

1. ☒ Claims 2, 3, and 5-9 are pending in the application.

   Of the above, claims _____ are withdrawn from consideration.

2. ☒ Claims 1 and 4 have been cancelled.

3. ☐ Claims _____ are allowed.

4. ☒ Claims 2, 3, and 5-9 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).

12. ☒ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☒ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

The proposed drawing correction referred to on page 1 of the response filed March 8, 1993 has not been received in the Office.

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an adequate written description of the invention, and/or failing to provide an enabling disclosure.

The specification does not adequately describe the feature added by the amendment to the last three lines of claim 2, that the speed of the stroke increases at the reversing positions and decreases at the side positions. On page 11, lines 7-12, the stroke speed is described as accelerating from position B to A, decelerating from A to D, accelerating from D to C, and finally decelerating from C to B. Thus, the recitation in the claim that the speed increases at the reversing positions and decreases at the side positions, is not supported by the specification because the specification describes both deceleration and acceleration at both the side and reversing position.

Claims 2, 3, and 5-9 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

Claims 2, 3, and 5-9 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 5, the recitation "by means the cam drive" is confusing; it appears that something has been left out of the line. Also on line 5, it is unclear what it meant by the cam drive actuating the spindle member. On line 6, the connected of the spindle member to the spool should be positively rather than inferentially set forth, and should be supported by structural elements or means for connecting the two elements together. On line 8, the crank drive should be positively rather than inferentially set forth in the claim, and on line 9, the location where the cam stud is mounted should be specified. On line 10 of claim 2, the sidewalls of the slot should be positively rather than inferentially set forth. On line 16, the recitation of "side positions" is vague and confusing, since the position referred to is in the middle of the stroke of the spool and not at a side in the sense that the term is usually used. Further, it appears that only one approximate position is being referred to rather than more than one.

The claims are all vague and indefinite because they are incomplete. The claims do not set forth all the essential element of a fishing reel, because they do not include any means for winding the line onto the spool.

In claim 3, line 5, "said longitudinal direction" has no proper antecedent basis in the claims. The reference to a center line is vague and indefinite because it is not set forth what it is at the center of. Assuming that the longitudinal direction referred to is the same as the longitudinal axis set forth in claim 2, the recitation that the center line is coincident with the direction of travel of the guide part, and transverse to the longitudinal axis or direction, is contradictory, since both of the latter two directions are the same.

In claim 6, the arcuate zones should be positively rather than inferentially set forth.

In claim 9, lines 2-3 the recitation of an angle of the side wall of the guide slot is vague and indefinite because the claim does not specify what the angle is measured relative to.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

> skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 2 and 5-9 are rejected under 35 U.S.C. § 103 as being unpatentable over Morishita in view of Hitachi.

Morishita shows a fishing reel which includes a spool 27 for receiving the fishing line, a cam drive for reciprocating the spool to distribute the line onto the spool, and a spindle 28 to which the spool is connected. The cam drive comprises a guide part 26 connected to the spindle and has an elongated guide slot 31 which receives a cam stud 29. The cam stud 29 is eccentrically mounted on a gear 24 to travel in a circular path and cause reciprocation of the spindle and spool in a direction parallel to the longitudinal axis of the spool.

Hitachi shows a traversing mechanism for use in a textile machine which includes a thread guide 13, an S-shaped cam groove 15, and a cam roller 14 which loosely fits into the cam groove to cause reciprocation of the thread guide. The apparatus of Hitachi is useful in connection which high speed winding of thread in a textile environment. The cam groove of Hitachi is

S-shaped to provide for uniform speed of the thread guide, as illustrated by line 18 in the graph of figure 3, to thereby cause even winding of the thread.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the guide slot 31 of Morishita in the shape of an S to provide for more even lay of the line onto the spool. To the extent that the limitation of the final three lines of claim 2 is understood in light of the specification, it appears to be met by the shape of cam groove suggested by Hitachi. The orientation of the slot and other dimensions thereof set forth in claims 5-9, would have been obvious to one skilled in the art through routine experimentation and optimization to determine what shape of cam groove would provide the most satisfactory distribution.

Claim 3 is so indefinite that it cannot be meaningfully treated with respect to the prior art at this time.

Applicant's arguments filed March 8, 1993 have been fully considered but they are not deemed to be persuasive.

In response to Applicant's argument that there is no suggestion to combine the references because the Shakespeare reference would work perfectly well with the C-shaped slot, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of

primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA) 1969. In this case, to the extent that the argument also applies to the Morishita reference now relied upon, while the Morishita reference might work perfectly well, one skilled in the art, considering both the Morishita and Hitachi references together, rather than merely looking at Morishita, would conclude that the S-shaped slot would work even better than the straight slot of Morishita. One skilled in the art would thus be motivated to improve the performance of Morishita by improving the operation of the level winding structure.

In response to Applicant's argument that Hitachi is nonanalogous art, it has been held that the determination that a reference is from a nonanalogous art is twofold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. *In re Wood*, 202 USPQ 171, 174.

In this case, the Hitachi reference is reasonable pertinent to the problem being addressed by Applicant, because it is concerned with a cam and follower system for traversing an element to provide level winding of a strand onto a spool. It should be noted that Hitachi specifically discloses that his device has general applicability in other environments requiring reciprocation of an element (translation, page 5, lines 3-7). It should further be noted that Hitachi's apparatus is not used in a weaving machine as maintained by Applicant, but rather is used in high speed winding of textile strands. Nowhere in the translation provided by Applicant is weaving mentioned.

Applicant argues that Hitachi is nonanalogous because it relies on a more complex structure than that found in a fishing reel. On skilled in the art, however, would recognize the usefulness of the S-shaped slot in other types of traverse arrangements, including the simple mechanism found in Morishita.

Applicant argues on page 5 of his remarks that Hitachi differs from that claimed invention because his device attempts to provide a uniform speed of traverse, which in the instant invention a changing speed is relied upon. While Applicant's disclosure may discuss the changing speed of the traverse, no specific structure is clearly set forth in the claim. As set forth above, the recitation in claim 2 of the changes in speed of the traverse is inconsistent with the specification.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

The amendments to the claims adding additional structural features of the reel necessitated the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathy Matecki whose telephone number is (703) 308-2688.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0771.

kam

July 25, 1993

Katherine Matecki

KATHERINE MATECKI
PRIMARY EXAMINER
ART UNIT 245